

REMARKS

Claims 14, 16, 18-19, and 27 are pending. Claims 15 and 17 have been canceled. Claim 14 has been amended to incorporate the subject matter of claim 15 and covers the scope of the canceled claim 15 in independent form. Claim 16 has been amended to be in independent form including all of the limitations of the base claim and any intervening claims.

I. REJECTION OF CLAIMS 14, 18 and 19 UNDER 35 U.S.C. § 102(b)

Claims 14, 18 and 19 are rejected under 35 U.S.C. § 102(b) as being anticipated by Cremonesi et al. (U.S. 6,329,254). Withdrawal of this rejection is respectfully requested for at least the following reasons.

Claim 14 has been amended to include the subject matter of claim 15, which was not covered by this rejection. As a result, this rejection no longer applies. Additionally, claims 18 and 19 depend from claim 14 and, as a result, are no longer covered by this rejection. Accordingly, withdrawal of this rejection is requested.

II. REJECTION OF CLAIM 15 UNDER 35 U.S.C. § 103(a)

Claim 15 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Cremonesi et al. (U.S. 6,329,254) in view of Rolandi (U.S. 5,923,975). Withdrawal of this rejection is respectfully requested for at least the following reasons.

Claim 15 has been canceled and, therefore, is no longer subject to this rejection. Claim 14 has been amended to include the subject matter of claim 15.

Rolandi fails to disclose forming a trench in the substrate between the first active region and the second active region, as recited in claim 14.

The Office Action states that Cremonesi et al. fail to teach forming a trench in the substrate between the first active region and the second active region prior to forming

the first insulator dielectric such that a vertical structure is formed by the first insulator dielectric. The office action asserts that Rolandi discloses forming a trench in the substrate between the first active region and the second active region prior to forming the first insulator dielectric such that a vertical structure is formed by the first insulator as cited in fig. 12. First, Rolandi fails to disclose forming a trench. Rolandi merely illustrates a substrate 1 with field oxide 3 formed on opposite ends of the substrate 1 (Column 4, lines 13-37). Second, Rolandi fails to disclose forming a trench between two active regions. Rolandi only defines the monocrystalline semiconductor 1 as having active areas of the devices defined by the isolation diffusions 2 and by the field oxide 3 and fails to teach forming a trench between two active regions (Column 4, lines 12-33). Third, Rolandi fails to disclose forming a vertical structure within the trench. Rolandi teaches forming a gate oxide 4 over the semiconductor 1 that extends onto the field oxide 3 in Fig. 12. However, the gate oxide 4 is not formed in a trench and does not comprise a vertical structure (Column 4, lines 33-46). As a result, Cremonisi et al. and Rolandi, alone or in combination, fail to disclose all of the elements of claim 14.

Accordingly, claim 14, which includes the limitations of previously pending claim 15, is non-obvious over the cited art and withdrawal of the rejection is respectfully requested.

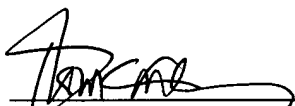
III. OBJECTION OF CLAIM 16

Claim 16 is objected to as being dependent upon a rejected base claim, but is otherwise allowable. Accordingly, claim 16 has been amended to be independent of the base claim and any intervening claims and is, therefore allowable. Withdrawal of this objection is respectfully requested.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should any fees be due as a result of the filing of this response, the Commissioner is hereby authorized to charge the Deposit Account Number 50-1733, AMDP796US.

Respectfully submitted,
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CERTIFICATE OF MAILING (37 CFR 1.8a)

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop Amendment, Assistant Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date: April 4, 2005 

Christine Gillroy

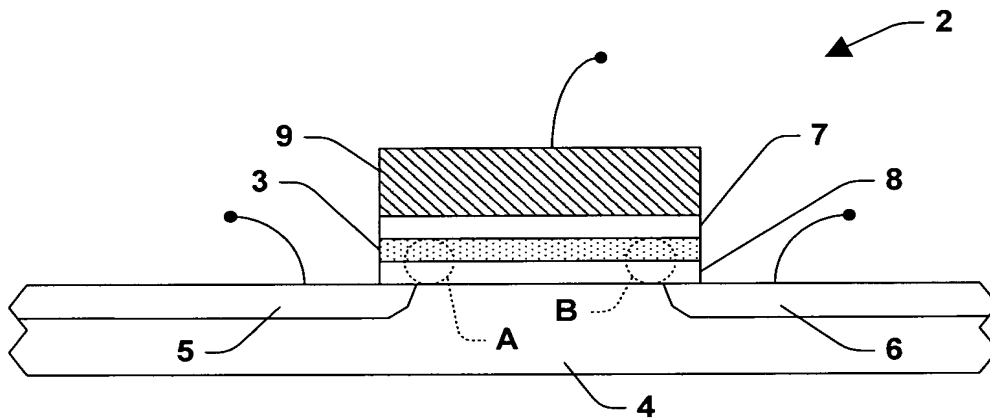
IN THE DRAWINGS

Please amend Fig. 1 by adding the legend –Prior Art– as suggested by the Examiner and as illustrated in the sheet showing the marked-up changes, which is labeled “Annotated Sheet Showing Changes” in the top margin thereof. A sheet labeled “Replacement Sheet” in the top margin is included that illustrates Fig. 1 with the amendment.



ANNOTATED SHEET SHOWING CHANGES

1/1



PRIOR ART
FIG. 1